

ABSTRACT

A robot apparatus which, by exploiting limited resources highly efficiently, is capable of making expressions matched to the motion or to complex variegated feeling or instinct states, representing the crucial information in achieving smooth communication with the human being, is disclosed. A method of expression by the robot apparatus is also disclosed. The robot apparatus expresses plural states, such as emotional states or the processing states of perceptual recognition, by a light radiating device loaded at a location of the head part of the humanoid robot apparatus walking on two legs. The light radiating device includes e.g. the color hue, saturation and patterns of light emission as expressive units represented independently of one another. A plural number of orthogonal states, that is, the emotional states and the states of perceptual recognition, are expressed simultaneously, using a plural number of the orthogonal representations of the light radiating device correlated by a unit for correlating plural reciprocally orthogonal states, derived from the own inner states or external stimuli, with at least one expressive unit.